



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,885	11/04/2005	Juergen Meyer	2345/207	4415
26646 7590 09/12/2008 KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004				
EXAMINER GILES, EBONI N				
ART UNIT 4133		PAPER NUMBER		
MAIL DATE 09/12/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/523,885

**Applicant(s)**

MEYER, JUERGEN

**Examiner**

EBONI GILES

**Art Unit**

4133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-893)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 4/17/06

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration has reviewed and understands the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration.

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be "material to patentability as defined in 37 CFR 1.56."

### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the abstract includes the legal phraseology "said". Correction is required. See MPEP § 608.01(b).

#### ***Claim Objections***

4. Claims 20 and 24 objected to because of the following informalities: The definition of SMS should be consistent in the specification and claims. Claim 20 refers to SMS as Service Message Signal and Claim 24 recites SMS as Signal Message Service. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 20, 24 and 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

7. In Claim 20, the Applicant claims a computer program that is able to perform modulate a SMS signal using frequency shift keying modulation. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized, however, claim 20 does not point out such a computer program.

8. In Claim 24, the Applicant claims a computer program that is able to demodulate a SMS signal using frequency shift keying modulation. Therefore, claim 24 is rejected

for the same reasons set forth in the rejection of claim 20 because there is no functional and structural interrelationship to a computer readable medium.

9. In Claim 28, the Applicant claims a computer program that is able to perform modulation and demodulation of a SMS signal using frequency shift keying modulation. Therefore, claim 28 is rejected for the same reason set forth in the rejection of claims 20 and 24 because the claim recites similar limitations.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 20, 24 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Each of these claims teaches that a computer program performs frequency shift keying modulation to modulate/demodulate a SMS signal. It is not clear to one of ordinary skill in the art how this computer program will perform this function.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 12-15, 17, 18, 20-22, 24-26, 28-30 rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19857902 to Kehr et al. ("Kehr") in view of U.S. Patent No. 7,177,303 B2 to Becker et al. ("Becker").

a. As to claims 12 and 13, Kehr discloses a method for the transmission of short messages to telecommunication networks to subscriber lines having analog user devices. In order to realize this method, Kehr discloses a terminal (TIX: Textual Information Exchange) which reads on said limitation of a suitably programmed computer. In regards to claim 12, Kehr describes a method to send a short message (SM), a gateway obtains the short message from the short message service center (SMSC) and produces a connection to the indicated call number of the analog user device. The Short Message Service (SMS) content present in digital form now is converted in signals in such a way that transmission is possible to the called analog user device. (Pg. 5, ¶ 0003) In regards to claim 13, Kehr describes a method to receive a short message (SM), the SMS is sent to a subscriber line equipped with a TIX and the aforementioned gateway establishes a call to said subscriber line. The call is accepted by the TIX, and after a brief handshake, the gateway can transmit the content of the SMS to the TIX. The call can be dismantled and received information displayed on the display of the analog user device (Pg. 6, ¶ 0003).

i. Kehr does not expressly disclose frequency shift keying as the method for modulating/demodulating a SMS signal characterized as the

data transmission between the short message terminal and the short message service center.

- ii. Becker discloses that the transmission protocol and the physical and administrative preconditions for the transmission of short messages in the SMS format between the terminal and the short message service center (Pg. 5, Col 2, lines 64-67). Becker further discloses that in the physical layer, the data transmission between terminal and service center is effected via DTMF signaling and/or via an FSK (frequency shift keying) off-hook signaling specified according to ETS 300 659-1 and ETS 300 659-2. These aforementioned transmission methods can be used in any desired combinations. In particular, the terminal can perform signaling via DTMF and the service center can utilize FSK modulation, in which case, of course, the respective receiving unit must be adapted for the method employed. (pg. 5, Col 2, lines 18-27)
- iii. Kehr and Becker are analogous art because they are from the same field of endeavor with respect to a telecommunication system for transmission of a Short Message Service signal.
- iv. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use frequency shift keying modulation for transmission of a short message (SM) in a fixed network as taught by Becker. The motivation would have been in order to enable the

transmission of short messages according to the SMS model in a fixed network (pg. 6, ¶ 0006).

As to claims 14 and 17, Kehr discloses a TIX analogous to the "suitably programmed" computer which partially takes over the communications control when transmitting a SMS signal as recited in the parent claim. The TIX is used for coding, or decoding, SMS content on the user side (pg. 3, ¶ 0006). In addition, the same motivation is used as the rejection for claims 12 and 13.

As to claims 15 and 18, Kehr discloses a gateway analogous to the voice-capable modem for communication with a Short Message Service Center (SMSC). The function of the gateway is conversion of SMS content to a format (e.g. modem tones) suitable for transmission to an analog user device. The gateway is an interface on one side to the SMSC and on the other side an interface to a public telecommunications network with subscriber lines having analog user devices (pg. 5, ¶ 0001). In addition, the same motivation is used as the rejection for claims 12 and 13.

As to claims 20 and 24, they are rejected for the same reasons set forth in the rejection of claims 12 and 13 because the claims recite similar limitations.

As to claims 21 and 25, the same rejection would be used as recited in their parent claims.

As to claim 28, it is rejected for the same reasons set forth in the rejection of claims 12 and 13 because the claim recites similar limitations.



As to claims 29 and 30, the same rejection would be used as recited in their parent claim.

As to claims 16 and 19, Kehr does not disclose the claimed "signal transmission rate of 1200 bit/s". Becker discloses that the physical layer uses a half-duplex 1200 baud modulation in the case of FSK signaling (pg. 7, col 4, lines 29-31)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the 1200 baud rate taught by Becker reads on 1200 bit/s since the baud rate is related to the number of signaling events made to a transmission medium per second in a digitally modulated signal. It is generally preferred that these concepts not be interchangeable unless the communication channel is specified. The communication channel is discernable and relating bits per second to the baud rate is appropriate. The motivation would have been in order to enable the transmission of short messages according to the SMS model in a fixed network (pg. 6, ¶ 0006).

14. Claims 23, 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19857902 to Kehr et al. ("Kehr") in view of U.S. Patent No. 7,177,303 B2 to Becker et al. ("Becker") as applied to claims 20, 24, 28 above, and further in view of standard ETSI ES 201 912 V1.1.1 (2002-01) "Access and Terminals (AT); Short Message Service (SMS) for PSTN/ISDN; Short Message Communication between a

fixed network Short Message Terminal Equipment and a Short Message Service Centre".

As to Claim 23, Kehr and Becker do not expressly disclose wherein the computer has an ISDN card.

ETSI ES 201 912 discloses that the basic requirement to transmit SM information via the PSTN/ISDN is a circuit switched connection between the involved SM entities (SMTE "Short Message Terminal Entity" and SMSC). After the connection is established, it makes no difference whether the SM-TE is connected to the PSTN or to the ISDN (pg. 20, ¶ 0005).

Kehr and Becker are analogous art because they are from the same field of endeavor with respect to a telecommunication system for transmission of a Short Message Service signal.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate an ISDN card as the computer claimed in the invention is the SM-TE. The motivation would have been to allow the SMS signal to transmit to an analog user device.

As to claim 27, it is rejected for the same reasons set forth in the rejection of claim 23 because the claims recite similar limitations.

As to claim 31, it is rejected for the same reasons set forth in the rejection of claim 23 because the claims recite similar limitations.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EBONI GILES whose telephone number is (571)270-7453. The examiner can normally be reached on Monday through Friday 8 to 5 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Abul Azad can be reached on (571) 272-7599. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ABUL AZAD/  
Supervisory Patent Examiner, Art Unit 4133